عنوان مقاله:

Effect of oyster mushroom wastes on performance, immune responses and intestinal morphology of broiler chickens

محل انتشار:

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نویسندگان:

Shila Hasanian Fard - *Department of Animal Science, Khorasgan (Isfahan) Branch, Islamic Azad University, Isfahan, Iran*

Majid Toghyani - *Department of Animal Science, Khorasgan (Isfahan) Branch, Islamic Azad University, Isfahan, Iran*

Sayed Ali Tabeidian - *Department of Animal Science, Khorasgan (Isfahan) Branch, Islamic Azad University, Isfahan, Iran*

خلاصه مقاله:

Background Mushroom wastes are widely left frommushroom production industries and have been supposed topossess prebiotic, antimicrobial, antifungal and antioxidantproperties. Due to difficulties with using antibiotic growthpromoters in poultry diet, mushroom wastes seem to be aproper substitute for them. Therefore, present experimentwas carried out to investigate the effect of oyster mushroomwastes on performance, immune responses and intestinalmorphology of broiler chickens. To conduct the trial, total of210-day-old broiler chickens (Ross 308) were assigned to 3dietary treatments and 5 replicates of 14 mixed birds. Subsequently,performance, immunity and intestinal morphologyparameters were evaluated throughout the experiment.Results 1 % mushroom wastes inclusion not significantlyincreased body weight (BW), weight gain (WG) and feedintake (FI) of chickens (P[0.05), while using 2 % ofthese wastes deteriorated BW and feed conversion ratio(FCR) (P.05). At 28 days of age, villus height andcrypt depth of jejunum were significantly increased usingboth levels of mushroom wastes, however, these indicesimpaired in ileum with the same mushroom levels(P.05). With the exception of antibody titer againstNewcastle disease virus which was compromised using2 %, other antibody-related parameters were not affectedby supplementing 1 % mushroom wastes (P[0.05). Theratio of heterophil to lymphocyte also decreased by thewaste inclusion (P.05).Conclusion Mushroom wastes in 1 % inclusion are ableto improve some parameters of performance and .immunityof broiler chicks. Nonetheless, supplementation in 2 %might compromise the mentioned indices

کلمات کلیدی:

Broiler chickens Mushroom wastes Performance Immunity Intestinal morphology